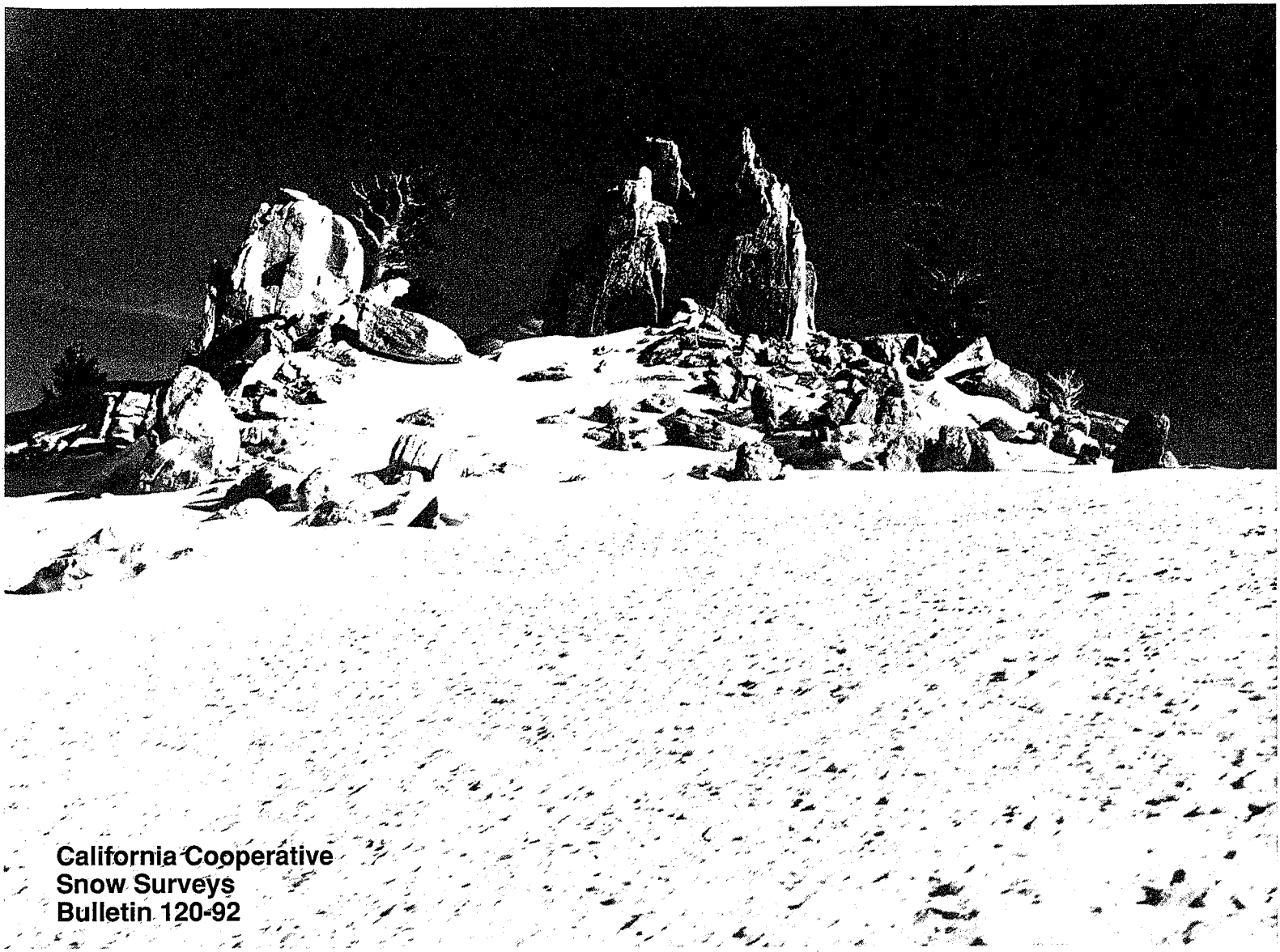

California Cooperative
Snow Surveys
Bulletin 120-92

State of California
The Resources Agency

Department of
Water Resources

Water Conditions in California

Report 4 May 1, 1992

Douglas P. Wheeler
Secretary for Resources
The Resources Agency

Pete Wilson
Governor
State of California

David N. Kennedy
Director
Department of Water Resources

STATE OF CALIFORNIA

Pete Wilson, Governor

THE RESOURCES AGENCY

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COOPERATING AGENCIES

Public Agencies

Buena Vista Water Storage District
Central California Irrigation District
East Bay Municipal Utility District
Friant Water Users Association
Kaweah Delta Water Conservation District
Kern Delta Water District
Kings River Conservation District
Lower Tule River Irrigation District
Merced Irrigation District
Modesto Irrigation District
Nevada Irrigation District
North Kern Water Storage District
Northern California Power Agency
Oakdale Irrigation District
Omochumne-Hartnell Water District
Oroville-Wyandotte Irrigation District
Placer County Water Agency
Sacramento Municipal Utility District
South San Joaquin Irrigation District
Tri-Dam Project
Tulare Lake Basin Water Storage District
Turlock Irrigation District
Yuba County Water Agency

Private Organizations

J.G. Boswell Company
Kaweah River Association
Kings River Water Association
St. Johns River Association
Tule River Association
U.S. Tungsten Corporation
State Water Contractors

Public Utilities

Pacific Gas and Electric Company
Southern California Edison Company
Sierra Pacific Power Company

Municipalities

City of Bakersfield
Water Department
City of Los Angeles
Department of Water and Power
City and County of San Francisco
Hetch Hetchy Water and Power

State Agencies

California Department of Forestry
& Fire Protection
California Department of Water Resources

Federal Agencies

U.S. Department of Agriculture
Forest Service(14 National Forests)
Pacific Southwest Forest and Range
Experiment Station
Soil Conservation Service
U.S. Department of Commerce
National Weather Service
U.S. Department of Interior
Bureau of Reclamation
Geological Survey, Water Resources
Division
National Park Service(3 National Parks)
U.S. Department of Army
Corps of Engineers

Other Cooperative Programs

Nevada Cooperative Snow Surveys
Oregon Cooperative Snow Surveys

SUMMARY OF WATER CONDITIONS
May 1, 1992

Below normal precipitation and runoff during April insured that this is the sixth year of the drought which affects so much of the West. Water year runoff is expected to be about half of average - about the same as last year. Despite the poor year, in-state reservoir storage is over two million acre-feet greater than it was at this time last year. Since remaining runoff is expected to be much less than for the same months last year, the temporary advantage in storage will diminish during the next three months.

FORECASTS of April through July runoff are now about 50 percent of average, a decrease of 5 percent from last month. Water year forecasts are down slightly too on most rivers and overall runoff amounts will be only 50 percent of average.

SNOWPACK water content decreased dramatically during April, the result of below normal precipitation and above normal temperatures. Statewide, the water content dropped from 60 to 25 percent of average with the least amount, 15 percent, in the packs of the southern half of the Central Valley. The North Coast pack is holding around 50 percent for this date.

PRECIPITATION in April was about two thirds of normal which lowered the statewide seasonal average to about 85 percent of normal. Seasonal precipitation percentages are highest in the southern area. Seasonal precipitation in the important water production regions of the Central Valley is about three fourths of normal.

RUNOFF for the season increased slightly to about 50 percent of average during the past month. As has been the case for the past few months, greatest seasonal runoff percentages have occurred in the relatively small streams of the South Coast area. The rivers of the Central Valley have had slightly more than half normal runoff.

RESERVOIR STORAGE is the continuing bright spot in California's water supply picture, remaining at about 70 percent of average despite below normal runoff. South Coast reservoirs, which are largely used to regulate imported water supplies, continue to hold above normal amounts. Storage in the North Lahontan reservoirs is very low.

SUMMARY OF WATER CONDITIONS

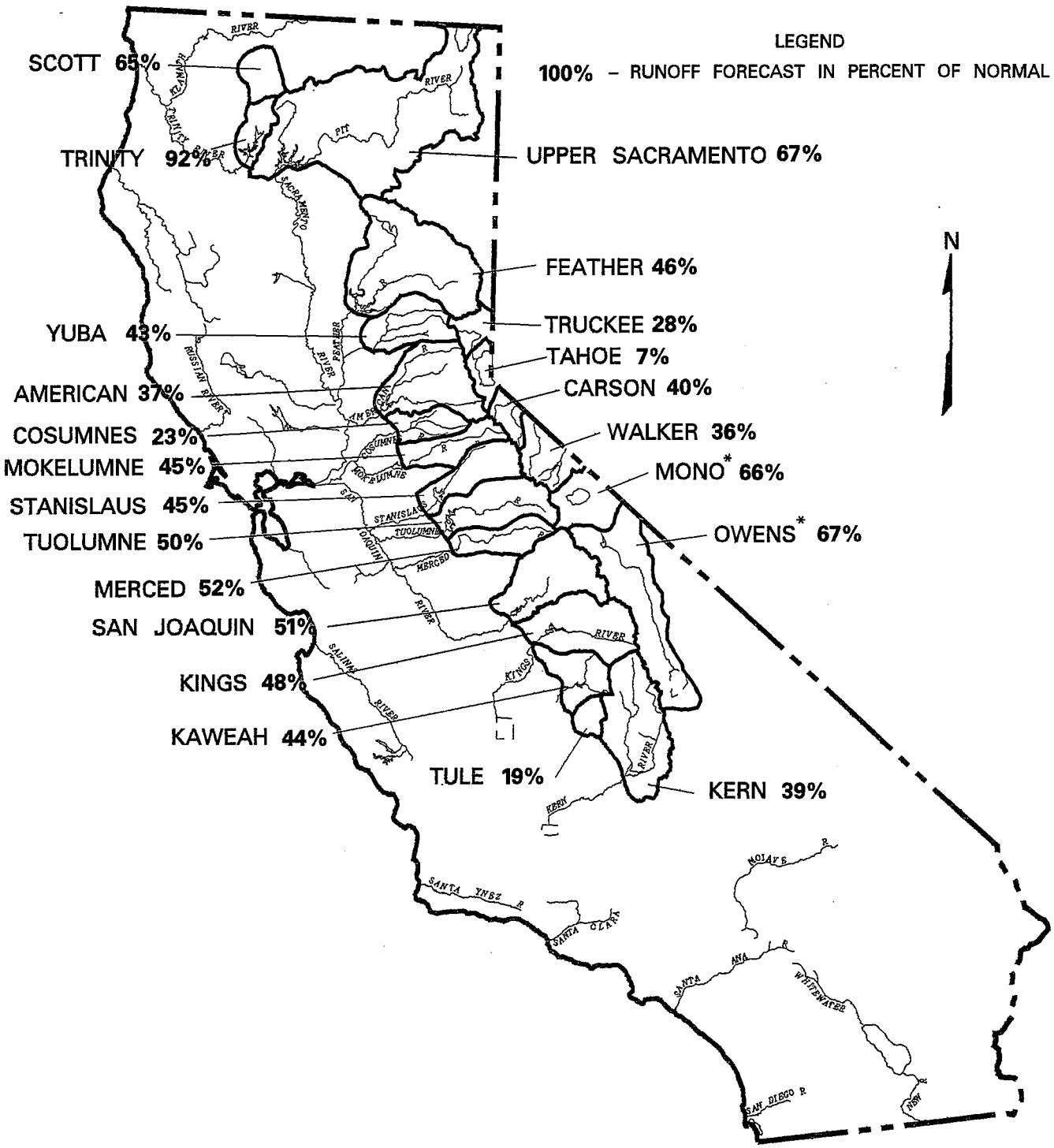
IN PERCENT OF AVERAGE

HYDROGRAPHIC AREA	PRECIPITATION OCTOBER 1 TO DATE	SNOW WATER CONTENT	RESERVOIR STORAGE	OCTOBER 1 RUNOFF TO DATE	APRIL-JULY RUNOFF FORECAST	WATER YEAR RUNOFF FORECAST
NORTH COAST	70	50	60	40	80	50
SAN FRANCISCO BAY	90	--	90	35	--	--
CENTRAL COAST	115	--	55	60	--	--
SOUTH COAST	140	--	115	130	--	--
SACRAMENTO BASIN	75	30	75	50	50	50
SAN JOAQUIN BASIN	75	15	75	55	50	45
TULARE LAKE BASIN	80	15	60	50	45	45
NORTH LAHONTAN	55	20	15	55	35	40
SOUTH LAHONTAN	130	30	90	70	65	65
COLORADO DESERT	225	--	--	--	--	--
STATEWIDE	85	25	70	50	50	50

FORECAST OF APRIL – JULY

UNIMPAIRED SNOWMELT RUNOFF

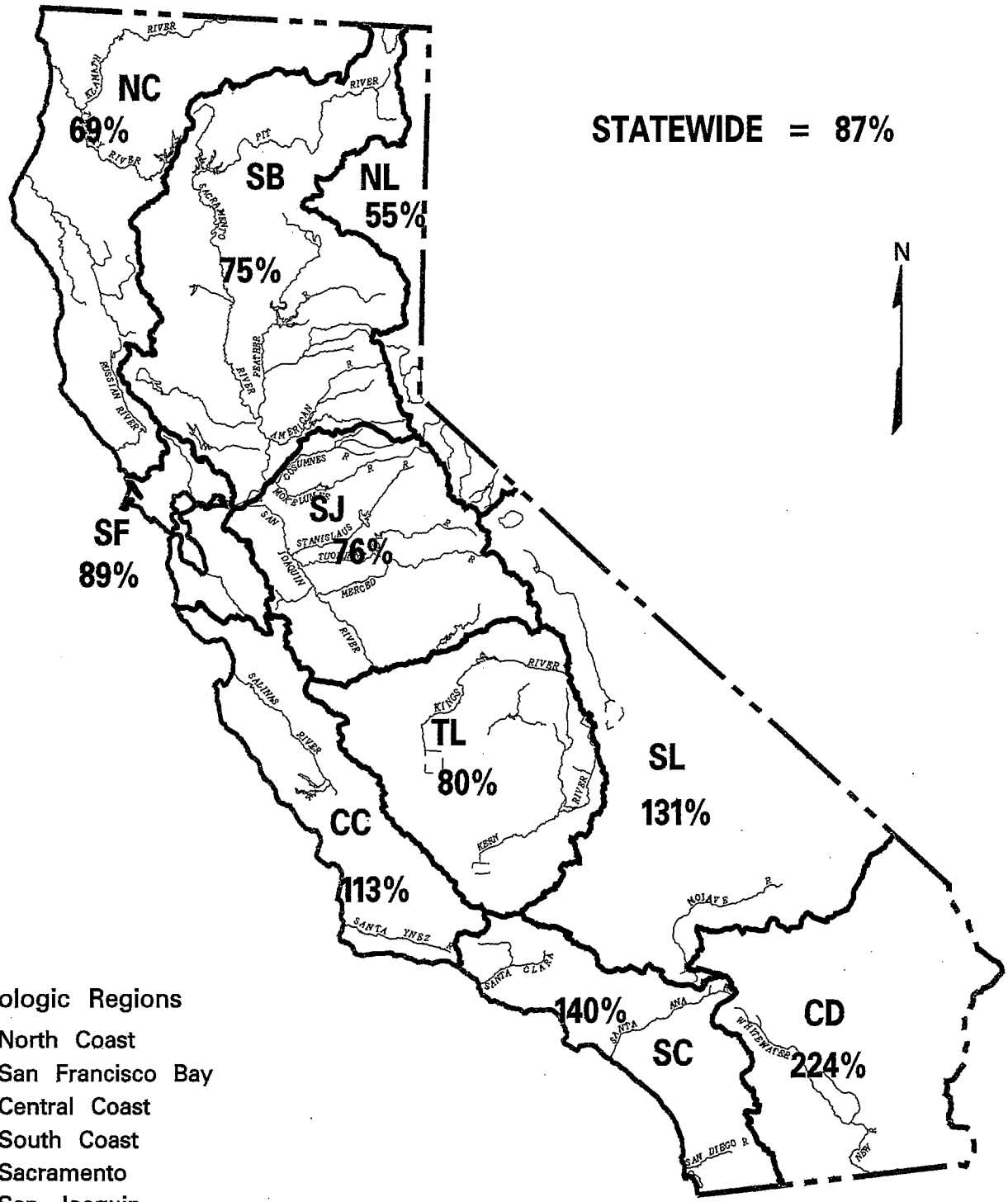
MAY 1, 1992



* FORECAST BY DEPARTMENT OF WATER AND POWER, CITY OF LOS ANGELES

SEASONAL PRECIPITATION

IN PERCENT OF AVERAGE TO DATE
OCTOBER 1, 1991 THROUGH APRIL 30, 1992



STATEWIDE = 87%

Hydrologic Regions

NC – North Coast
SF – San Francisco Bay
CC – Central Coast
SC – South Coast
SB – Sacramento
SJ – San Joaquin
TL – Tulare Lake
NL – North Lahontan
SL – South Lahontan
CD – Colorado Desert

WATER YEAR IS OCTOBER 1 THROUGH SEPTEMBER 30

FORECASTS OF APRIL-JULY UNIMPAIRED RUNOFF FOR CENTRAL VALLEY STREAMS MAY 1, 1992

DRAINAGE BASIN AND WATERSHED	April through July Unimpaired Runoff in 1,000 Acre-Feet					
	HISTORICAL			FORECASTS		
	50 Year Average	Maximum of Record	Minimum of Record	April-July Forecast	Percent of Average	80% Prob. Range
SACRAMENTO RIVER BASIN						
Upper Sacramento River						
Sacramento River at Shasta Lake	297	702	39	255	86	
McCloud River at Shasta Lake	411	850	185	240	58	
Pit River at Shasta Lake	1,062	1,796	480	640	60	
Total inflow to Shasta Lake	1,824	3,189	726	1,230	67	1,130-1,530
Sacramento River above Bend Bridge, near Red Bluff	2,491	4,674	943	1,600	64	1,500-2,070
Feather River						
Feather River at Lake Almanor near Pratville	333	675	120	180	54	
North Fork at Pulga	1,028	2,416	243	480	47	
Middle Fork near Clio (3)	86	518	4	15	17	
South Fork at Ponderosa Dam	110	267	13	45	41	
Total inflow to Oroville Reservoir	1,857	4,676	392	850	46	700-1,150
Yuba River						
North Yuba below Goodyears Bar	286	647	51	120	42	
Inflow to Jackson Mdws and Bowman Reservoirs	112	236	25	50	45	
South Yuba at Langs Crossing	233	481	57	110	47	
Yuba River at Smartville	1,047	2,424	200	450	43	370-590
American River						
North Fork at North Fork Dam	262	716	43	90	34	
Middle Fork near Auburn	522	1,406	100	200	38	
Silver Creek below Camino Diversion Dam	173	386	37	70	40	
Total inflow to Folsom Reservoir	1,284	3,074	229	470	37	380-620
Sacramento River at Sacramento						
SAN JOAQUIN RIVER BASIN						
Cosumnes River at Michigan Bar	129	363	8	30	23	20-60
Mokelumne River						
North Fork near West Point (4)	437	829	104	200	46	
Total inflow to Pardee Reservoir	465	1,065	102	210	45	170-270
Stanislaus River						
Middle Fork below Beardsley Dam	334	702	64	160	48	
North Fork inflow to McKay's Point Dam	224	503	34	100	45	
Total inflow to Melones Reservoir	713	1,710	116	320	45	290-420
Tuolumne River						
Cherry Creek and Eleanor Creek near Hetch Hetchy	322	727	97	160	50	
Tuolumne River near Hetch Hetchy	606	1,392	153	320	53	
Total inflow to Don Pedro Reservoir	1,200	2,682	301	600	50	510-730
Merced River						
Merced River at Pohono Bridge	362	888	80	200	55	
Total inflow to Exchequer Reservoir	617	1,587	123	320	52	270-390
San Joaquin River						
San Joaquin River at Mammoth Pool (2)	1,014	2,279	235	540	53	
Big Creek below Huntington Lake (2)	95	264	11	40	42	
South Fork near Florence Lake (2)	202	511	58	110	55	
Total inflow to Millerton Lake	1,228	3,355	262	630	51	530-740
San Joaquin River near Vernalis						
TULARE LAKE BASIN						
Kings River						
North Fork Kings River near Cliff Camp	239	565	50	110	46	
Total inflow to Pine Flat Reservoir	1,203	3,114	273	580	48	490-680
Kaweah River at Terminus Reservoir	284	814	61	125	44	100-155
Tule River at Success Reservoir	63	256	2	12	19	9-17
Kern River						
Kern River near Kernville	373	1,203	83	160	43	
Total inflow to Isabella Reservoir	461	1,657	84	180	39	140-220

(1) All 50-year averages are based on data for water years 1941-1990 except:
(2) 45-year average based on years 1936-80. (4) 36-year average based on years 1936-71.
(3) 44-year average based on years 1936-79. (5) See inside back cover for definition of unimpaired runoff and 80 percent probability ranges.

FORECASTS OF WATER YEAR UNIMPAIRED RUNOFF FOR CENTRAL VALLEY STREAMS MAY 1, 1992

Water Year October through September Unimpaired Runoff in 1,000's Acre-Feet												
HISTORICAL			*	*	*	* DISTRIBUTION					FORECASTS	
50 Year Average	Maximum of Record	Minimum of Record	October through January	February	March	April	May	June	July	August and September	Water Year Forecast	Percent of Average
856	1,964	165										
1,244	2,353	577										
3,145	5,150	1,484										
5,987	10,796	2,479	810	760	590	455	345	240	190	340	3,730 (3,600-4,100)	62
8,664	17,180	3,294	1,080	1,290	940	635	420	310	235	400	5,310 (5,170-5,900)	61
780	1,269	366										
2,417	4,400	666										
219	637	24										
291	562	32										
4,617	9,492	994	310	385	345	385	245	130	90	130	2,020 (1,850-2,350)	44
564	1,056	102										
181	292	30										
379	565	98										
2,390	4,926	369	120	240	200	220	160	50	20	20	1,030 (940-1,180)	43
616	1,234	66										
1,070	2,575	144										
318	705	59										
2,736	6,381	349	100	230	210	240	170	50	10	10	1,020 (920-1,190)	37
												51
385	1,253	20	7	41	41	20	6	3	1	1	120 (110-150)	31
626	1,009	197										
748	1,800	129	32	40	50	105	75	25	5	3	335 (290-400)	45
471	929	88										
1,150	2,952	155	60	70	80	135	130	40	15	10	540 (470-650)	47
461	1,147	123										
770	1,661	258										
1,882	4,430	383	80	95	115	230	240	110	20	10	900 (800-1,040)	48
461	1,020	92										
966	2,859	150	35	55	50	130	130	50	10	5	465 (410-540)	48
1,337	2,964	308										
112	298	14										
248	653	71										
1,776	4,642	362	70	70	75	210	230	145	45	35	880 (770-1,000)	50
												48
284	607	58										
1,669	4,294	383	70	50	60	190	220	135	35	30	790 (690-900)	47
444	1,402	92	19	13	18	40	50	30	5	5	180 (155-215)	41
145	615	16	6	7	7	7	3	1	1	0	32 (28-38)	22
558	1,577	163										
717	2,309	175	45	20	25	55	65	40	20	20	290 (245-335)	40

* Unimpaired runoff to date

FORECASTS OF APRIL-JULY UNIMPAIRED RUNOFF FOR SELECTED CALIFORNIA STREAMS

MAY 1, 1992

DRAINAGE BASIN AND WATERSHED	April through July Unimpaired Runoff in 1,000 Acre-Feet				
	HISTORICAL			FORECASTS	
	50 Year Average(1)	Maximum of Record	Minimum of Record	April-July Forecast	Percent of Average
NORTH COAST AREA					
Trinity River at Lewiston	653	1,593	80	600	92
Scott River at Ft. Jones	200	*	*	130	65
Upper Klamath Lake(1)(2)(5)	521	1,151	177	176	34
LAHONTAN AREA					
Truckee River, Lake Tahoe to Farad accretion	268	713	58	75	28
Lake Tahoe Rise in feet (assuming gates closed)	1.5	3.75	0.23	0.1	7
East Carson River near Gardnerville	186	407	43	75	40
West Carson River at Woodfords	54	131	12	21	39
East Walker River near Bridgeport	63	209	7	11	17
West Walker River near Coleville	148	330	35	65	44
Owens River(3)	233	579	96	155	67

(1)Forecast period of April-September

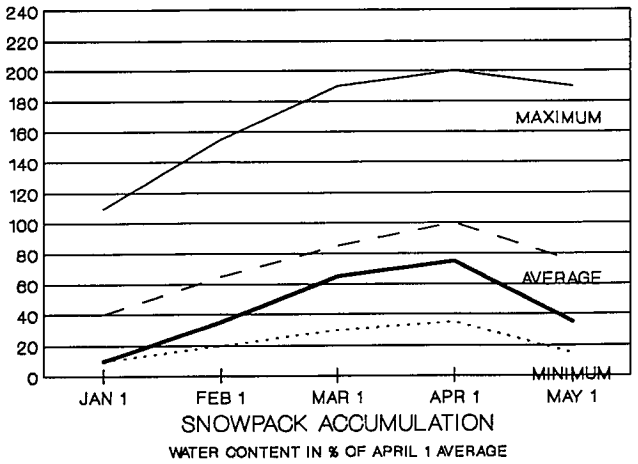
(2)Forecast by U.S. Soil Conservation Service, Portland, Or.

(3)Forecast by Dept. of Water and Power, City of Los Angeles

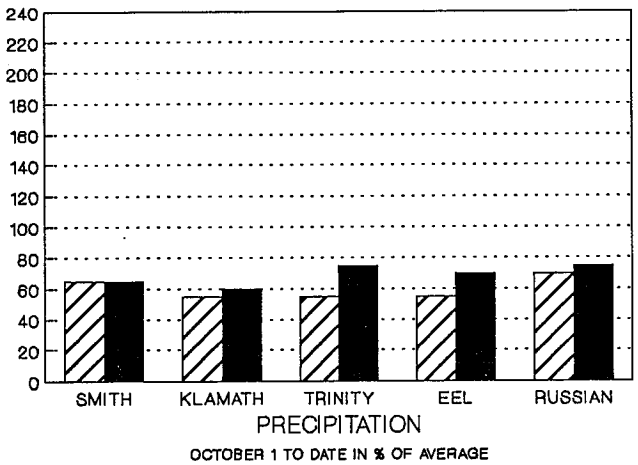
(4)Inside back cover for definition of unimpaired runoff.

(5)Average period of 25 years

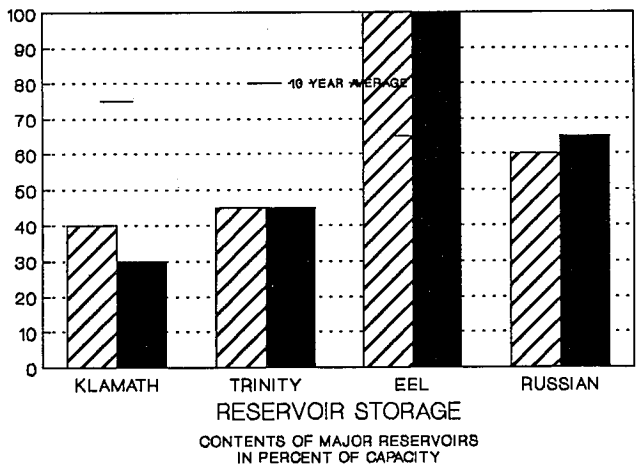
NORTH COAST AREA



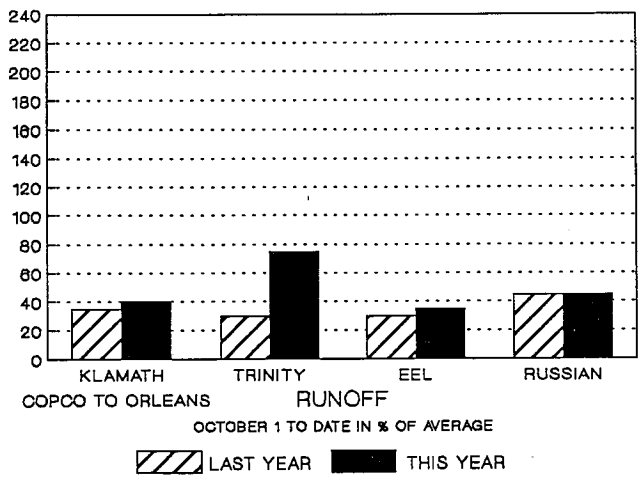
SNOWPACK - First of the month measurements made at 8 snow courses indicate an area wide snow water equivalent of 14.8 inches. This is 50 percent of the average for this date and 35 percent of the seasonal (April 1) average. Last year at this time the pack was holding 13.9 inches of water.



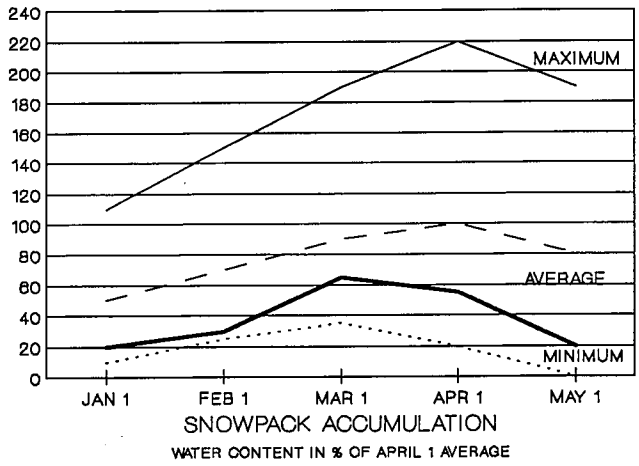
PRECIPITATION - Seasonal precipitation (October 1 through the end of last month) on this area was 70 percent of normal. Precipitation last month was about 115 percent of the monthly average. Seasonal precipitation at this time last year stood at 60 percent of normal.

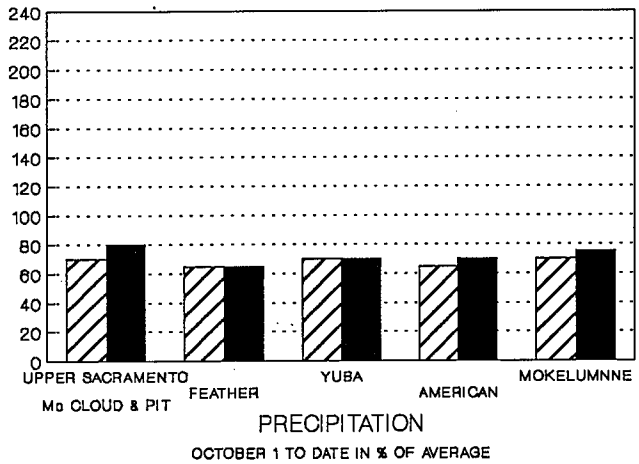


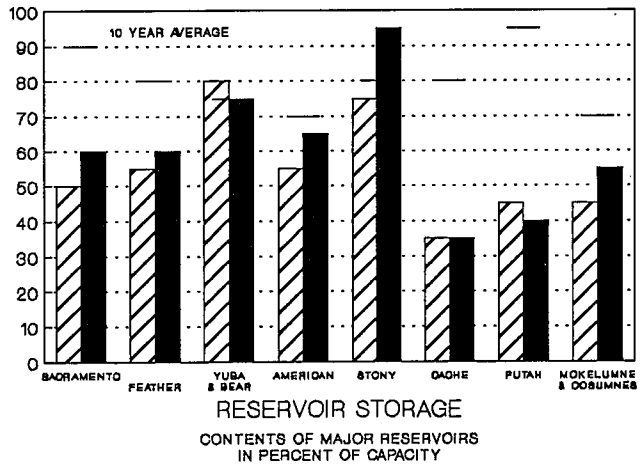
RESERVOIR STORAGE - First of the month storage in 7 reservoirs was 1.5 million acre-feet which is 60 percent of average. About 50 percent of available capacity was being used. Storage in these reservoirs at this time last year was 60 percent of average.

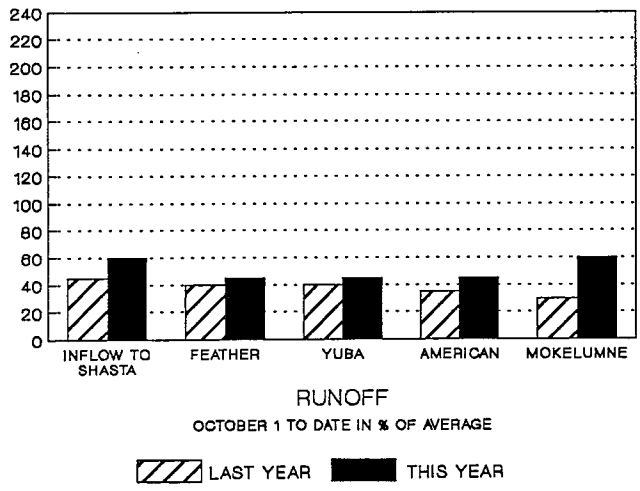


RUNOFF - Seasonal runoff of streams draining the area totaled 4.5 million acre-feet which is 40 percent of average for this period. Last year, runoff for the same period was 30 percent of average.









SACRAMENTO BASIN

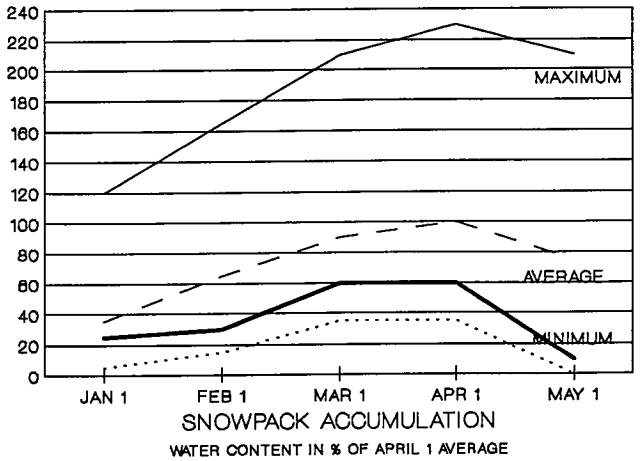
SNOWPACK - First of the month measurements made at 68 snow course indicate a basin-wide snow water equivalent of 8.6 inches. This is 30 percent of the average this date and 25 for April 1. Last year at this time, the pack was holding 14.5 inches of water.

PRECIPITATION - Seasonal precipitation (October 1 through the end of last month) on the Sacramento Basin was 75 percent of normal. Precipitation last month was about 70 percent of the monthly average. Seasonal precipitation at this time last year stood at 70 percent of average.

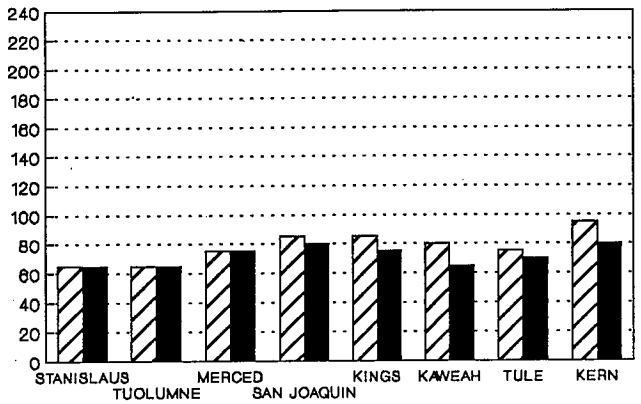
RESERVOIR STORAGE - First of the month storage in 43 reservoirs was 9.7 million acre-feet which is 75 percent of average. About 60 percent of available capacity was being used. Storage in these reservoirs was about 65 percent of average at this time last year.

RUNOFF - Seasonal runoff from streams draining into the basin totaled 6.9 million acre-feet which is 50 percent of average for this period. Last year runoff for the same period was 40 percent of average.

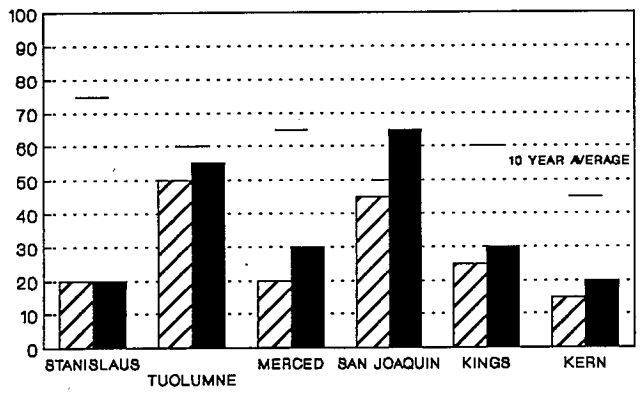
The Sacramento River Index for the year is forecast at 9.4 million acre-feet assuming median meteorological conditions for the remainder of the year. This continues to classify the year as "critical" in the Sacramento-San Joaquin Delta according to the State Water Resources Control Board's Decision 1485. The SRI at this time last year was forecasted to be 8.7 million acre-feet, also critical.



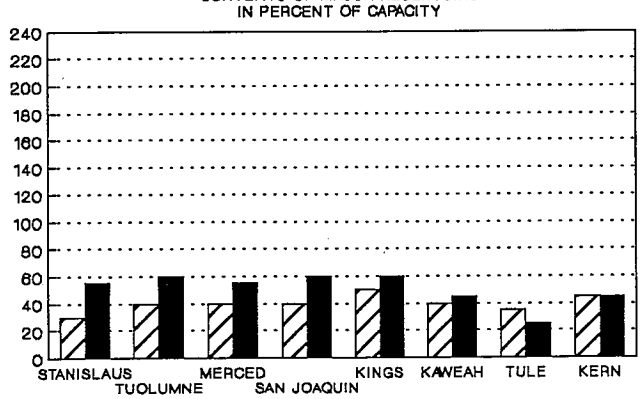
SNOWPACK ACCUMULATION
WATER CONTENT IN % OF APRIL 1 AVERAGE



PRECIPITATION
OCTOBER 1 TO DATE IN % OF AVERAGE



RESERVOIR STORAGE
CONTENTS OF MAJOR RESERVOIRS
IN PERCENT OF CAPACITY



RUNOFF
OCTOBER 1 TO DATE IN % OF AVERAGE

LAST YEAR THIS YEAR

SAN JOAQUIN AND TULARE LAKE BASINS

SNOWPACK - First of the month measurements made at 53 San Joaquin Basin snow courses indicate a basin wide snow water equivalent of 5.4 inches which is 15 percent of average for this date and 10 percent of the seasonal (April 1) average. Last year at this time, the pack was holding 19.5 inches of water.

At the same time, 41 Tulare Lake Basin snow courses indicated a basin-wide snow water equivalent of 3.6 inches which is 15 percent of the average for this date and 10 percent of the seasonal average. Last year at this time, the Basin was holding 12.0 inches of water.

PRECIPITATION - Seasonal precipitation (October 1 through the end of last month) on the San Joaquin Basin was 75 percent of normal. Precipitation last month was 15 percent of the monthly average. Seasonal precipitation at this time last year stood at 75 percent of normal.

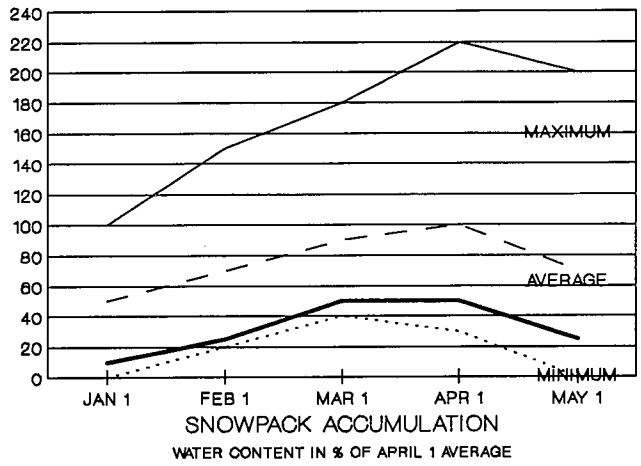
Seasonal precipitation on the Tulare Lake Basin was 80 percent of normal. Precipitation last month was 10 percent of the monthly average. Seasonal precipitation at this time last year stood at 85 percent of normal.

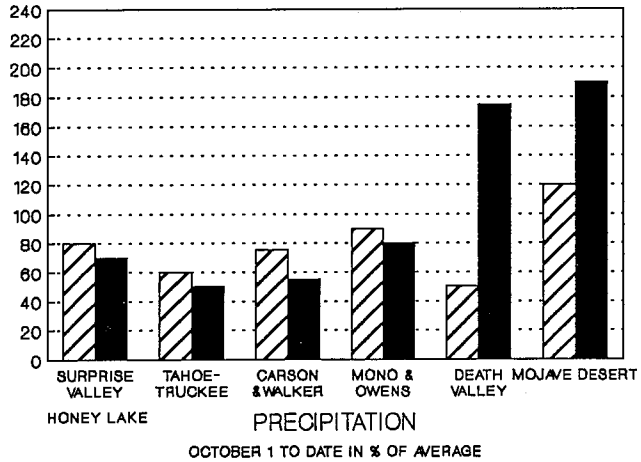
RESERVOIR STORAGE - First of the month storage in 33 San Joaquin Basin reservoirs was 5.7 million acre-feet which is 75 percent of average. About 50 percent of available capacity was being used. Storage in these reservoirs at this time last year was 60 percent of average.

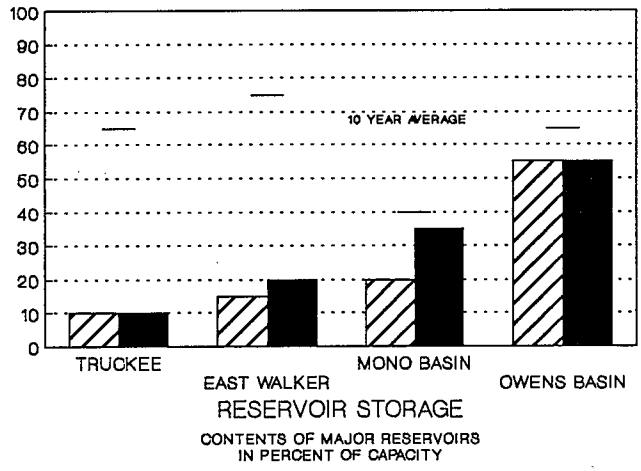
First of the month storage in 6 Tulare Lake Basin reservoirs was 603 thousand acre-feet which is 60 percent of average. About 30 percent of available capacity was being used. Storage in these reservoirs at this time last year was 55 percent of average.

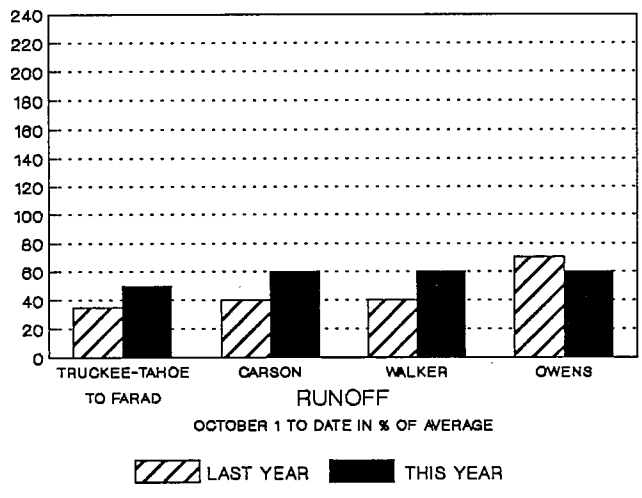
RUNOFF - Seasonal runoff of streams draining into the San Joaquin Basin totaled 1.9 million acre-feet which is 55 percent of average for this period. Last year, runoff for this same period was 35 percent of average.

Seasonal runoff of streams draining into the Tulare Lake Basin totaled 643 thousand acre-feet which is 50 percent of average for this period. Last year, runoff for this same period was 45 percent of average.









NORTH AND SOUTH LAHONTAN AREA

SNOWPACK - First of the month measurements made at 9 North Lahontan snow courses indicate an area wide snow water equivalent of 7.2 inches which is 20 percent of average for this date and 15 percent of the seasonal (April 1) average. Last year at this time, the pack was holding 16.3 inches of water.

At the same time, South Lahontan telemetered snow sensors indicated an area wide snow water content of about 6 inches. Two measured South Lahontan courses indicated an area-wide snow water equivalent of 9.9 inches. Estimated area snowpack is about 30 percent of average for this date. Last year at this time, the pack was holding 16.1 inches of water.

PRECIPITATION - Seasonal precipitation (October 1 through the end of last month) over the North Lahontan area averaged 55 percent of normal. Precipitation last month was 40 percent of the monthly average. Seasonal precipitation at this time last year stood at 75 percent of normal.

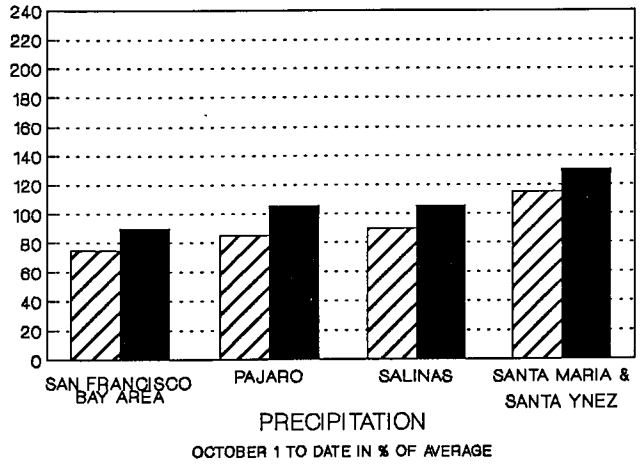
Seasonal precipitation over the South Lahontan area was 130 percent of normal. Last month's precipitation was 55 percent of the monthly average. Seasonal precipitation at this time last year stood at 85 percent of normal.

RESERVOIR STORAGE - First of the month storage in 5 North Lahontan reservoirs was 110 thousand acre-feet which is 15 of average. About 10 percent of available capacity was being used. Storage in these reservoirs at this time last year was 15 percent of average. The elevation of Lake Tahoe was about 1.2 feet below its natural rim and not expected to rise much more.

First of the month storage in 8 South Lahontan reservoirs was 237 thousand acre-feet which is 90 percent of average. About 60 percent of available capacity was being used. Storage in these reservoirs at this time last year was 85 percent of average.

RUNOFF - Seasonal runoff of streams draining the North Lahontan area totaled 426 thousand acre-feet which is 55 percent of average for this period. Last year, runoff for this same period was 40 percent of average.

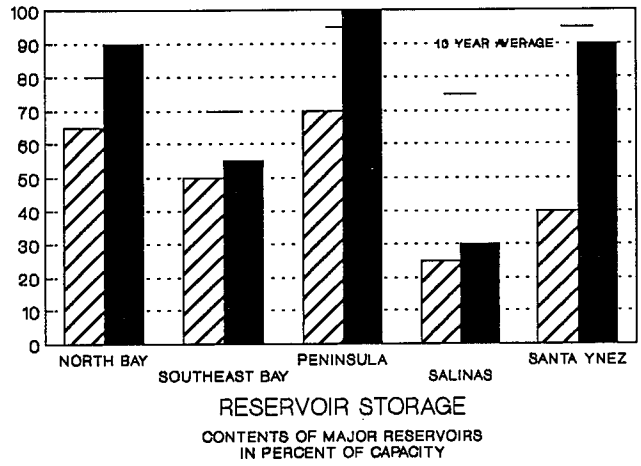
Seasonal runoff of the Owens River in the South Lahontan area totaled 81 thousand acre-feet which is 70 percent of average for this period. Last year, runoff for this same period was 55 percent of average.



SAN FRANCISCO AND CENTRAL COAST AREAS

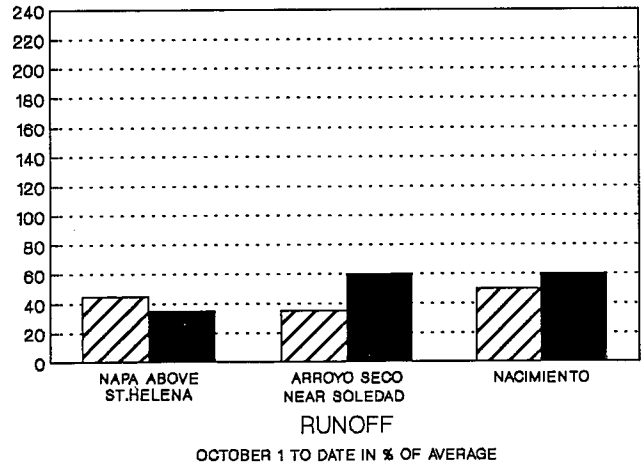
PRECIPITATION - Seasonal precipitation (October 1 through the end of last month) on the San Francisco Bay area was 90 percent of normal. Precipitation last month was 40 percent of the monthly average. Seasonal precipitation at this time last year stood at 75 percent of normal.

Seasonal precipitation on the Central Coast area averaged 115 percent of normal. Precipitation last month was only 5 percent of the monthly average. Seasonal precipitation at this time last year stood at 95 percent of normal.



RESERVOIR STORAGE - First of the month storage in 18 major Bay area reservoirs was 462 thousand acre-feet which is 90 percent of average. About 65 percent of available capacity was being used. Storage in these reservoirs at this time last year was 75 percent of average.

First of the month storage in 6 major Central Coast reservoirs was 408 thousand acre-feet which is 55 percent of average. About 45 percent of available capacity was being used. Storage in these reservoirs at this time last year was 40 percent of average.



RUNOFF - Seasonal runoff of the Napa River near St. Helena totaled 25 thousand acre-feet which is 35 percent of average for this period. Last year, runoff for this same period was 45 percent of average.

Seasonal runoff of selected Central Coast streams totaled 187 thousand acre-feet which is 60 percent of average for this period. Last year, runoff for this same period was less than 45 percent of average.

LAST YEAR THIS YEAR

SOUTH COAST AND COLORADO RIVER AREAS

PRECIPITATION - Seasonal precipitation (October through the end of last month) on the South Coast was 140 percent of normal. Precipitation last month was 20 percent of the monthly average. Seasonal precipitation at this time last year was 95 percent of normal.

Seasonal precipitation in the Colorado River area was 225 percent of normal. Precipitation last month was over 125 percent of average. Seasonal precipitation at this time last year was 95 percent of the average.

RUNOFF - Seasonal runoff from selected South Coast streams totaled 70 thousand acre-feet which is 130 percent of average. Last year, runoff for the same period was 60 percent of average.

The April through July inflow to Lake Powell is forecasted to be 4.75 million acre-feet which is 59 percent of normal.

RESERVOIR STORAGE - May 1 storage in 29 major South Coast area reservoirs was 1.5 million acre-feet or 115 percent of average. About 75 percent of available capacity was being used. Storage in these reservoirs at this time last year was nearly 100 percent of average.

First of the month combined storage in Lakes Powell, Mead, Mohave and Havasu was about 36.2 million acre-feet which is 100 percent of average. About 70 percent of available capacity was being used. One year ago, these reservoirs were storing 100 percent of average.

STATE WATER PROJECT

On April 1, conservation storage (Oroville plus the State's share of San Luis) was almost 3.0 million acre-feet, compared to the historic average of 4.0 million acre-feet.

Allocations of water delivery approvals to SWP contractors were increased to 45 percent in March 1992 due to the improved water supply at that time. An evaluation is presently being conducted with the May water supply forecast and other criteria to determine whether an increase in deliveries can be made for this year.

CENTRAL VALLEY PROJECT

CVP storage increased from 5.3 to 5.9 million acre-feet in April. Total CVP storage is now 69 percent of average. Last year, on April 30th, storage was 5.5 million acre-feet. Bureau of Reclamation forecasts of April-July runoff are as follows: Trinity 88 percent, Shasta 66 percent, Folsom 34 percent, New Melones 41 percent, Friant 51 percent. All previously announced water allocations remain in effect; 75 percent supplies to water rights contractors, 25 percent supplies to agricultural contactors and 75 percent of recent historical use of M & I contractors. Forecasted CVP storage for September 30, 1992 is 3.2 million acre-feet, a loss of 0.1 million acre-feet compared to last September 30. Planned deliveries in the Friant Division are 82 percent Class I, 0 percent Class II.

MAJOR WATER DISTRIBUTION PROJECTS

RESERVOIR STORAGE

(AVERAGES BASED ON PERIOD RECORD)

RESERVOIR	CAPACITY 1,000 AF	AVERAGE STORAGE 1,000 AF	STORAGE AS OF APRIL 30 1991 1,000 AF	1992 1,000 AF	PERCENT AVERAGE
STATE WATER PROJECT					
Oroville	3,540	2,995	1,600	2,017	67
San Luis SWP	1,060	975	590	951	98
Lake Del Valle	77	39	40	39	100
Silverwood	73	67	72	67	100
Pyramid Lake	171	164	166	163	100
Castaic Lake	324	277	187	305	110
Perris Reservoir	132	116	125	121	104
CENTRAL VALLEY PROJECT					
Clair Engle Lake	2,450	2,110	1,117	1,060	50
Shasta Lake	4,552	4,153	2,202	2,671	64
Whiskeytown	241	231	222	229	99
Folsom	975	739	596	696	94
New Melones	2,420	1,750	433	365	21
Millerton Lake	521	315	370	443	140
San Luis CVP	980	850	939	903	106
COLORADO RIVER PROJECT					
Lake Mead	26,159	19,434	19,852	20,112	103
Lake Powell	25,002	14,756	14,587	13,913	94
Lake Mohave	1,810	1,637	1,618	1,585	97
Lake Havasu	619	578	552	589	102
EAST BAY MUNICIPAL UTILITY DISTRICT					
Pardee	210	180	162	196	109
Camanche	431	279	131	135	48
East Bay (4 reservoirs)	151	132	134	127	97
CITY & COUNTY OF SAN FRANCISCO					
Hetch Hetchy	360	149	85	172	116
Cherry Lake	268	133	106	122	92
Lake Eleanor	26	14	4	3	22
South Bay (4 reservoirs)	225	179	112	159	89
CITY OF LOS ANGELES(DWP)					
Crowley Lake(Long Valley)	183	116	109	122	105
Grant Lake	48	20	11	22	110
Other Aqueduct Storage(6 reservoirs)	95	69	64	47	68

DEPARTMENT OF WATER RESOURCES - CALIFORNIA DATA EXCHANGE CENTER
TELEMETERED SNOW WATER EQUIVALENTS - MAY 1, 1992

BASIN NAME / STATION NAME	AGENCY	ELEV FEET	APR 1 AVG	TODAY	INCHES OF WATER EQUIVALENT PERCENT OF APR 1	24 HRS AGO	1 WEEK AGO
TRINITY RIVER							
PETERSON FLAT	USBR	7150	----	2.4	----	3.2	12.0
RED ROCK MOUNTAIN	USBR	6700	39.6	24.2	61%	25.5	30.7
BONANZA KING	USBR	6450	40.5	14.0	35%	16.1	20.1
SHIMMY LAKE	USBR	6200	40.3	41.2	102%	42.5	48.4
MIDDLE BOULDER #3	USBR	6200	28.3	3.3	12%	4.6	13.1
HIGHLAND LAKES	USBR	6030	29.9	9.2	31%	10.1	19.8
SCOTTS MOUNTAIN	USBR	5900	----	.0	----	1.0	6.0
MUMBO BASIN	USBR	5700	22.4	.7	3%	1.0	5.6
BIG FLAT	USBR	5100	----	.0	----	.4	.4
SACRAMENTO RIVER							
CEDAR PASS	SCS	7100	18.1	.5	3%	.5	.7
BLACKS MOUNTAIN	DWR	7100	----	.0	----	.1	.1
SAND FLAT	USBR	6750	42.4	----	----	----	----
MEDICINE LAKE	USBR	6700	----	1.1	----	1.3	7.4
ADIN MOUNTAIN	SCS	6350	13.6	.0	0%	.1	----
SNOW MOUNTAIN	USBR	5950	27.0	.0	0%	.4	.4
SLATE CREEK	USBR	5600	29.0	----	---	---	---
STOUTS MEADOW	USBR	5400	36.0	1.9	5%	3.4	11.0
FEATHER RIVER							
KETTLEROCK	DWR	7300	25.5	.0	0%	.0	.0
GRIZZLY	DWR	6900	29.7	.0	0%	.0	.7
PILOT PEAK	DWR	6800	52.6	.0	0%	.0	.0
GOLD LAKE	DWR	6750	36.5	8.3	23%	9.0	14.2
HUMBUG	DWR	6500	28.0	7.3	26%	8.2	15.5
RATTLESNAKE	DWR	6100	14.0	.0	0%	.0	.0
BUCKS LAKE	DWR	5750	44.7	10.6	24%	11.8	20.3
FOUR TREES	DWR	5150	20.0	.0	0%	.4	.4
YUBA & AMERICAN RIV							
LAKE LOIS	DWR	8800	----	18.9	----	21.6	26.1
SCHNEIDERS	SMUD	8750	34.5	11.8	34%	12.6	18.2
CAPLES LAKE COURSE	USBR	7800	30.9	.0	0%	.0	3.4
ALPHA	SMUD	7600	35.9	.0	0%	1.6	3.4
BETA	DWR	7600	----	4.4	----	4.4	1.6
FORNI RIDGE	USBR	7600	37.0	.0	0%	.0	2.2
SILVER LAKE	USBR	7100	22.7	.0	0%	.2	.2
CENT SIERRA SNOW LAB	USFS	6950	33.6	.0	0%	1.2	1.2
HUYSINK	USBR	6600	42.6	6.9	16%	7.5	11.4
VAN VLECK	SMUD	6700	35.9	.0	0%	.0	1.2
ROBBS SADDLE	SMUD	5900	21.4	.0	0%	.0	.1
GREEK STORE	USBR	5600	21.0	.0	0%	0	0
BLUE CANYON	USBR	5280	9.0	----	----	----	----
ROBBS POWERHOUSE	SMUD	5150	5.2	.0	0%	.0	.0
MOKEL. & STANIS. RIV							
DEADMAN CREEK	USBR	9250	37.2	9.0	24%	9.5	13.4
HIGHLAND MEADOW	USBR	8800	47.9	12.5	26%	13.4	19.0
GIANELLI MEADOW	USBR	8350	55.5	15.7	28%	16.1	21.5
LOWER RELIEF VALLEY	DWR	8100	41.2	3.2	8%	4.0	11.2
BLUE LAKES	SCS	8000	33.1	13.2	40%	13.2	16.9
MUD LAKE	SMUD	7900	44.9	16.6	37%	17.4	23.0
STANISLAUS MEADOW	USBR	7750	47.5	5.0	11%	6.0	13.0
BLOODS CREEK	USBR	7200	35.5	.0	0%	.6	4.1
BLACK SPRINGS	USBR	6500	32.0	.4	1%	.4	6.9
TUOLUMNE & MERCED R.							
DANA MEADOWS	DWR	9800	27.7	7.4	27%	8.2	13.4
SLIDE CANYON	DWR	9200	----	11.2	----	11.9	17.8
SNOW FLAT	DWR	8700	44.1	9.8	22%	10.5	17.6
TUOLUMNE MEADOWS	DWR	8600	22.6	.0	0%	.5	.8
HORSE MEADOW	DWR	8400	48.6	7.9	16%	9.9	13.8
OSTRANDER LAKE	DWR	8200	34.8	4.6	13%	5.9	12.4
PARADISE	DWR	7650	----	.0	----	2.3	9.5
GIN FLAT	DWR	7050	34.2	.0	0%	.5	5.3
LOWER KIBBIE	DWR	6600	27.4	.0	0%	1.3	1.3
SAN JOAQUIN RIVER							
VOLCANIC KNOB	USBR	10100	30.1	13.1	43%	13.7	16.3
AGNEW PASS	USBR	9450	32.3	11.1	34%	11.8	17.0
KAISER POINT	USBR	9200	37.8	3.1	8%	4.7	11.0
GREEN MOUNTAIN	USBR	7900	30.8	.2	1%	.2	1.0

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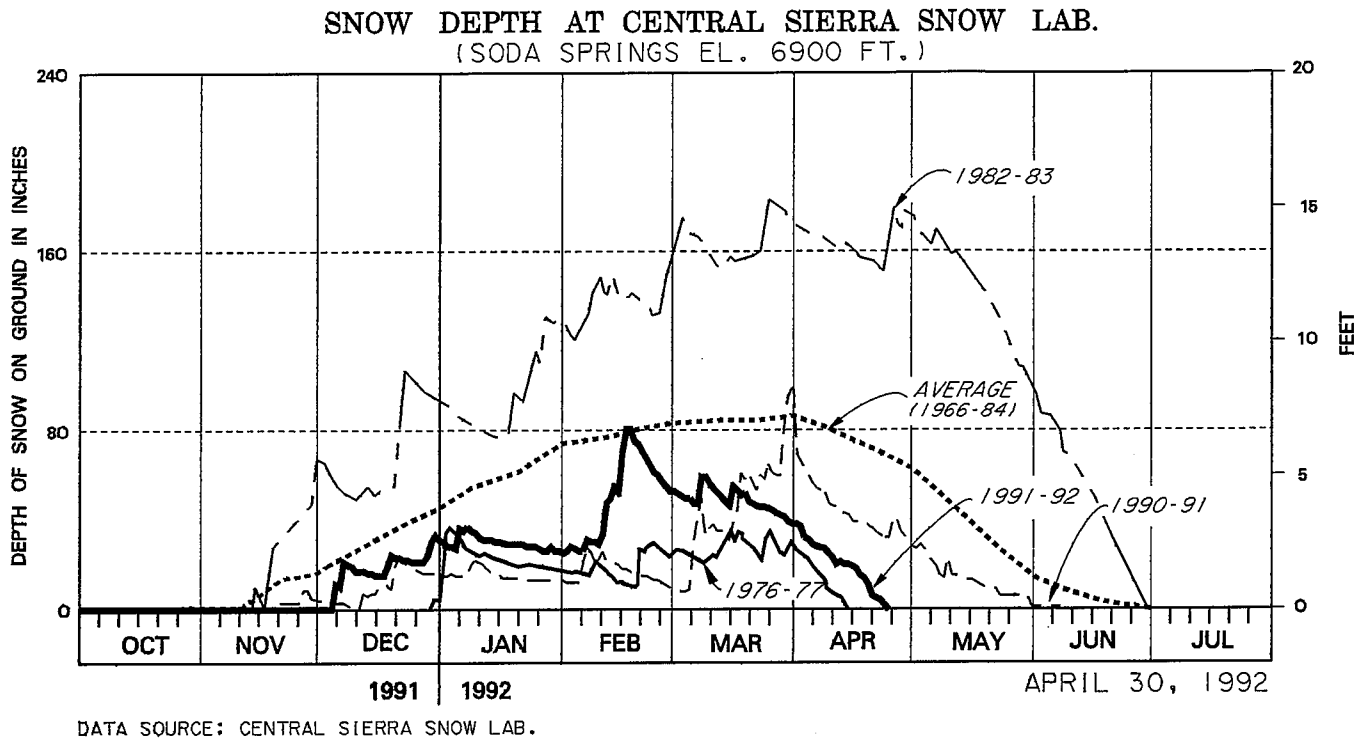
BASIN NAME / STATION NAME	AGENCY	ELEV FEET	APR 1 AVG	TODAY	INCHES OF WATER EQUIVALENT PERCENT OF APR 1	24 HRS AGO	1 WEEK AGO
TAMARACK SUMMIT	USBR	7600	30.5	.0	0%	1.2	8.7
CHILKOOT MEADOW	USBR	7150	38.0	2.4	6%	2.8	11.0
HUNTINGTON LAKE	USBR	7000	20.1	.0	0%	.4	1.0
GRAVEYARD MEADOW	USBR	6900	18.8	.0	0%	.4	.4
POISON RIDGE	USBR	6900	28.9	0	0%	0	.8
KINGS RIVER							
BISHOP PASS	DWR	11200	----	12.4	----	13.1	17.0
CHARLOTTE LAKE	DWR	10400	----	7.0	----	7.7	11.9
STATE LAKES	USCE	10400	29.0	1.4	5%	2.7	7.3
MITCHELL MEADOW	USCE	10375	32.9	13.5	41%	14.1	17.3
BLACKCAP BASIN	USBR	10300	34.3	4.6	13%	4.6	5.9
UPPER BURNT CORRAL	DWR	9700	34.6	17.0	49%	18.3	22.9
WEST WOODCHUCK MDW	USCE	9100	32.8	.4	1%	1.1	7.6
BIG MEADOWS	DWR	7600	25.9	.0	0%	.0	.0
KAWEAH & TULE RIVERS							
QUAKING ASPEN	DWR	7200	21.0	.0	0%	.0	.1
GIANT FOREST	USCE	6400	10.0	.0	0%	.1	.1
KERN RIVER							
UPPER TYNDALL CREEK	USCE	11500	27.7	9.9	36%	10.4	13.2
CRABTREE	DWR	10700	19.8	4.3	22%	4.9	8.5
CHAGOOPA PLATEAU	DWR	10300	21.8	6.5	30%	6.5	11.1
PASCOES	USCE	9150	24.9	9.3	37%	10.4	15.6
TUNNEL	DWR	8950	15.6	.0	0%	.4	.6
WET MEADOW	USCE	8900	30.3	.0	0%	.4	1.8
CASA VIEJA MDW	DWR	8400	20.9	.0	0%	.0	1.3
BEACH MEADOW	DWR	7650	11.0	.0	0%	----	----
SURPRISE VALLEY AREA							
DISMAL SWAMP	SCS	7050	29.2	.0	0%	.0	4.3
TRUCKEE RIVER							
MOUNT ROSE SKI AREA	SCS	8850	38.5	9.4	24%	10.2	15.1
INDEPENDENCE LAKE	SCS	8450	41.4	16.1	39%	16.4	19.4
BIG MEADOWS	SCS	8700	25.7	.0	0%	.0	.0
INDEPENDENCE CAMP	SCS	6500	21.8	.0	0%	.0	.3
INDEPENDENCE CREEK	SCS	6500	12.7	.0	0%	.0	.0
LAKE TAHOE BASIN							
HEAVENLY VALLEY	SCS	8800	28.1	.0	0%	.0	2.0
HAGANS MEADOW	SCS	8000	16.5	.0	0%	.0	.0
MARLETTE LAKE	SCS	8000	21.1	.1	0%	.1	.4
ECHO PEAK	SCS	7800	39.5	----	----	.0	2.7
RUBICON NO. 2	SCS	7500	29.1	----	----	----	3.6
WARD CREEK NO. 3	SCS	6750	39.4	----	----	.7	----
FALLEN LEAF LAKE	SCS	6300	7.0	.0	0%	.0	.0
CARSON RIVER							
EBBETTS PASS	SCS	8700	38.8	1.9	5%	2.7	11.2
POISON FLAT	SCS	7900	16.2	.0	0%	.0	.0
WALKER RIVER							
VIRGINIA LAKES RIDGE	SCS	9200	20.3	3.7	18%	4.6	8.0
LOBDELL LAKE	SCS	9200	17.3	.0	0%	.0	2.1
SONORA PASS BRIDGE	SCS	8750	26.0	2.5	10%	2.2	8.5
LEAVITT MEADOWS	SCS	7200	8.0	.0	0%	.0	.0
OWENS RIVER/MONO LK.							
GEM PASS	LADWP	10750	31.7	17.6	56%	18.3	20.9
SAWMILL MEADOW	DWR	10300	19.4	3.3	17%	3.9	8.5
COTTONWOOD LAKES	LADWP	10200	11.6	2.0	18%	3.2	8.3
BIG PINE #3	LADWP	9800	17.9	.0	0%	.7	4.6
SOUTH LAKE	LADWP	9600	16.0	.0	0%	.7	4.2
MAMMOTH PASS (RP)	USBR	9500	42.4	14.2	33%	14.8	19.3
MAMMOTH PASS-6 TANKS	USBR	9500	----	7.9	----	9.3	15.0
ROCK CREEK	LADWP	8200	----	.0	----	.4	.7

NORMAL SNOWPACK ACCUMULATION EXPRESSED AS A PERCENT OF APRIL 1ST AVERAGE

AREA	JANUARY	FEBRUARY	MARCH	APRIL	MAY
CENTRAL VALLEY NORTH	45	70	90	100	75
CENTRAL VALLEY SOUTH	45	65	85	100	80
NORTH COAST	40	60	85	100	80



❄❄❄❄❄ SNOWLINES ❄❄❄❄

DECADE COMPARED Here is a look at statewide May 1 hydrologic data for the past ten years. The figures are in terms of average for the date. It is interesting to note that, in terms of snow water content, 80 percent of the years are below normal and 70 percent of the precipitation and seasonal runoff years are also below normal.

It is also noteworthy that 1983 broke records at many locations for precipitation, snow water content and runoff.

Year	Precipitation	Snow Water Content Content	Reservoir Storage	Seasonal Runoff to Date	April-July Runoff Forecast	Water Runoff Forecast
1992	85	25	70	50	50	50
1991	75	65	65	35	60	45
1990	55	10	70	40	35	40
1989	80	40	90	80	70	70
1988	80	20	85	50	35	45
1987	65	20	100	55	45	45
1986	135	105	115	170	105	155
1985	85	35	110	80	70	60
1984	105	75	115	140	85	125
1983	190	300	115	250	215	235

SNOWPACK- Snow data is a major index of spring and summer runoff from Sierra Nevada watersheds. April 1 data historically reflects the magnitude of the snowpack at or near the maximum seasonal accumulation. Averages are based on April 1 data for the period 1941-1990 (50 years, except for data sites established after 1941.)

PRECIPITATION- Averages are based on the period 1941-1990 (50 years, except for data sites established after 1931.)

RUNOFF AND FORECASTS- Runoff data and runoff forecasts are shown as unimpaired values. Unimpaired runoff represents the natural water production of a river basin, unaltered by upstream diversions, storage, or by export or import of water to or from other watersheds. Forecast of runoff assumes median conditions subsequent to the date of forecast.

Runoff probability ranges are statistically derived from historical data. The 80 percent probability range is comprised of the 90 percent exceedence level value and the 10 percent exceedence level value. This means that actual runoff should fall within the stated limits eight times out of ten.

Runoff averages for most streams are based on the 50 year period (1941-1990). For more details, contact California Cooperative Snow Surveys, P.O. Box 942836, Sacramento, CA 94236-0001, (916) 445-2196.

On the Front Cover

Late season snowpack at Cottonwood Pass in the Owens River Basin

DWR photo

State of California – The Resources Agency
DEPARTMENT OF WATER RESOURCES
P.O. Box 942836
Sacramento CA 94236-0001

FIRST CLASS